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#include<stdio.h>
#include<conio.h>
void main()
{
    int a[20],b[20],n,i,j,temp,p,s,m,x,t=0;
    clrscr();
    printf("Enter head pointer position:");
    scanf("%d",&a[0]);
    s=a[0];
    printf("\nEnter previous head position:");
    scanf("%d",&p);
    printf("\nEnter max track limit:");
    scanf("%d",&m);
    printf("\nEnter number of processes:");
    scanf("%d",&n);
    printf("\nEnter processes in request order");
    for(i=1;i<=n;i++)
    {
        scanf("%d",&a[i]);
    }
    a[n+1]=m;
    a[n+2]=0;
    for(i=n+1;i>=0;i--)
    {
        for(j=0;j<=i;j++)
        {
            if(a[j]>a[j+1])
            {
                temp=a[j];
                a[j]=a[j+1];
                a[j+1]=temp;
            }
        }
    }
    for(i=1;i<=n+1;i++)
    {
        if(s==a[i])
        {
            x=i;
        }
        j=0;
        if(s<p)
        {
            for(i=x;i>0;i--)
            {
                t+=(a[i]-a[i-1]);
                b[j++]=a[i];
            }
            t+=a[x+1]-a[0];
            b[j++]=a[0];
            for(i=x+1;i<n+1;i++)
            {
                t+=(a[i+1]-a[i]);
                b[j++]=a[i];
            }
            b[j++]=a[i];
        }
        else
        {
            for(i=x;i<n+2;i++)
            {
                t+=(a[i+1]-a[i]);
                b[j++]=a[i];
            }
            t+=a[n+2]-a[x-1];
            b[j++]=a[n+2];
            for(i=x-1;i>1;i--)
            {
                t+=(a[i]-a[i-1]);
                b[j++]=a[i];
            }
            b[j++]=a[i];
        }
    }
}

```

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}
printf("\nProcessing order:");
for(i=0;i<=n+1;i++)
printf("\t%d",b[i]);
printf("\nTotal Head Movement:%d",t);
getch();
}
```